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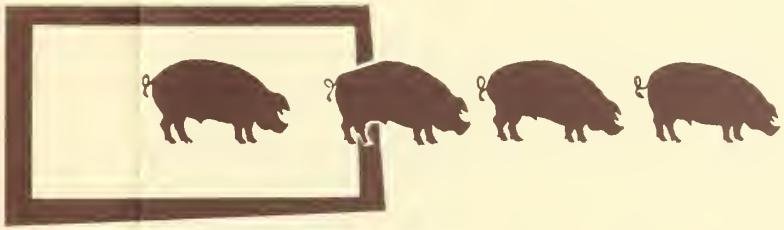
TRICHINOSIS

How it affects YOU

How it affects your HOGS

What you can do about it



Trichinosis is a disease that is caused by small thread-like worms called trichinae.[1] It is not catching. People get trichinosis when they eat raw or underdone pork that contains trichinae. Few of the millions of hogs killed each year for food have living trichinae in their muscles, but, since there are some, you should never eat pork that is not properly cooked. Cooking pork throughout kills the worms.

[1] *Trichinella spiralis.*

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HOW TRICHINOSIS AFFECTS YOU

Trichinae spend most of their lives curled up inside a membrane or cyst in muscle tissue. When a person eats pork that contains these living encysted worms, his digestive juices dissolve the membrane. The young worms then travel into the intestines where they grow, mate, and bear young in about a week. They are irritating and may cause upset stomach, vomiting, diarrhea, and other symptoms. These symptoms usually appear in 24 to 48 hours.

One mature female trichina may give birth to a thousand or more microscopic larvae. Eventually the parent worms pass out through the intestines. The young worms get into the blood and are carried to all parts of the body. They invade the muscles, where they grow for about 3 weeks and then coil up. Each one becomes surrounded by a membrane (encysted) as its parents were in the muscles of the hog. When thousands of the young trichinae travel through the body at one time, they may cause illness. The patient may have muscular pain, rising fever, headache, and prostration. After the worms stop in the muscles, other symptoms develop. These may include: Swelling in the face and other parts of the body, sore eyes, hemorrhages under the skin, sore throat, headache, fever, and difficult breathing. Stiffness of the muscles may occur in severe infections. Some patients may have symptoms of heart disease or symptoms of brain disorder, such as delirium or coma.

Thiabendazole has been reported to reduce intestinal and muscle infections of trichinae in animals under experimental conditions. However, it has not been fully evaluated for use in treating human trichinosis. The doctor can treat some symptoms of trichinosis and prevent complications—pneumonia may follow a severe attack. Of the people who show symptoms of trichinosis, about 5 percent die. Most patients recover, even some who are severely infected.

The number of live trichinae in the pork that is eaten usually determines the seriousness of the disease. Eating moderate amounts of lightly infected raw or imperfectly cooked pork may result in slight illness or no illness. Eating even small quantities of underdone or raw pork that contain large numbers of trichinae, or large quantities of lightly infected pork, may produce a painful and serious case of trichinosis.

HOW IT AFFECTS YOUR HOGS

Swine get trichinae when they eat scraps of pork or the flesh of dead pigs, dogs, cats, skunks, rabbits, rats, or mice containing the encysted worms. Swine may get trichinae if they eat feces passed by animals having intestinal trichinae.

Trichinosis is practically never diagnosed in living swine because other, better-known diseases show similar symptoms.

Within a few days after eating a large quantity of trichinous meat, affected hogs may stop eating, vomit, and have diarrhea. When the young worms invade the muscles, beginning about the second week after infection, affected hogs often lie motionless and may have a high fever. During this stage, hogs may die; however, recovery is the rule unless infection is severe. Hogs may have trichinosis without showing any special symptoms.

After the worms reach the muscles, disease symptoms may gradually disappear. Animals regain their appetite and apparently recover. The muscles appear normal to the naked eye when the animal has recovered. Generally all of the symptoms that are seen in severe infections may be lacking in light infections.

Although thiabendazole has been shown to reduce infection with trichinae in animals, the difficulty of determining when pigs are exposed to infection precludes its use for controlling trichina infection in these animals.

WHAT YOU CAN DO

To Protect Yourself

In packing plants operating under Federal meat inspection, pork products that usually are eaten without cooking by the consumer are processed to kill trichinae—by cooking, special freezing, or special curing. Cooking is the best way to make pork products safe from trichinae in the home and on the farm.

In cooking pork, remember that large pieces must be cooked longer than small ones to allow heat to penetrate into the center of the meat. Large pieces that are well cooked on the outside may be underdone or raw at the center. Take particular care to cook pork chops until they are heated throughout. A good test for "doneness" of chops and loin roasts is to make small cuts next to the bone and into the thicker part of the meat. If the meat or juice is still pink, the meat is not done.

Always cook fresh sausage containing pork until it is heated through to the center. Always cook processed sausage unless you are certain that these products were processed, under Federal supervision, to be eaten without cooking.

When using a meat thermometer, heat cured hams labeled "cook before eating" to an internal temperature of 160° F., cured picnic shoulders to 170°, and fresh pork, 170° to 185°. These temperatures will assure a flavorful and tender product as well as a cooked product that is safe to eat.

Without using a meat thermometer, cook large, thick cuts of pork weighing 10 pounds or more at least 30 minutes to the pound at an oven temperature of 325° F. (slow oven). Cook similar cuts weighing less than 10 pounds at 325° for 35 to 45 minutes to the pound. Frozen meat takes up to 1½ times as long to cook as meat that is at refrigerator temperature at the start of cooking.

To Protect Your Hogs

To control trichinosis in swine, get rid of the sources of infection.

Less than 0.2 percent of grain-fed hogs are infected with trichinae, while surveys show that a much higher percentage of hogs fed uncooked garbage can be expected to have trichinae. Of these infected animals, however, about 90 percent of those fed grain and 60 percent of those fed garbage have so few trichinae that they are little threat to human health. The cooking of garbage intended for feeding to swine is now required in all States. This has reduced trichina infection in hogs fed properly cooked garbage.

Don't let hogs eat uncooked garbage, raw pork, offal, or the raw or imperfectly cooked flesh of any animal that could have trichinae.

Burn or bury deeply in quicklime all hogs and other animals that die on the farm.

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